UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

45200

7590

07/22/2010

K&L Gates LLP 1900 MAIN STREET, SUITE 600 IRVINE, CA 92614-7319 EXAMINER

SHEIKH, HUMERA N

ART UNIT PAPER NUMBER

1615 DATE MAILED: 07/22/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,362	01/19/2001	Solomon S. Steiner	1951300.00047	8907

TITLE OF INVENTION: DRY POWDER FORMULATIONS OF ANTIHISTAMINE FOR NASAL ADMINISTRATION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	10/22/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

## Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correcte maintenance fee notificat	correspondence includired below or directed other ions.	ng the Patent, advance on herwise in Block 1, by (a	rders and notification of many specifying a new corresponding to the cor	naintenance fees will condence address; an	be mailed to the current d/or (b) indicating a sep	correspondence address as arate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				s) Transmittal. This c rs. Each additional pa	ertificate cannot be used:	or domestic mailings of the for any other accompanying ent or formal drawing, must
45200 K&L Gates LL 1900 MAIN STE IRVINE, CA 920	REET, SUITE 600	/2010		Cortifi	cate of Mailing or Trans	smission g deposited with the United st class mail in an envelope above, or being facsimile late indicated below.
						(Depositor's name)
						(Signature)
						(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	A	ITORNEY DOCKET NO.	CONFIRMATION NO.
09/766,362 TITLE OF INVENTION	01/19/2001 : DRY POWDER FORM	MULATIONS OF ANTIH	Solomon S. Steiner HSTAMINE FOR NASAL	ADMINISTRATION	1951300.00047	8907
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE F	EE TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	10/22/2010
EXAM	INER	ART UNIT	CLASS-SUBCLASS			
SHEIKH, H	UMERA N	1615	424-489000			
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME AD PLEASE NOTE: Unla recordation as set forth (A) NAME OF ASSIG	ess an assignee is identi n in 37 CFR 3.11. Comp GNEE	"Indication form led. Use of a Customer A TO BE PRINTED ON T ified below, no assignee oletion of this form is NO	(B) RESIDENCE: (CITY	ely, elim (having as a megent) and the names of news or agents. If no printed.  e) tent. If an assignee assignment. and STATE OR COU	ember a 2	locument has been filed for
Please check the appropri			inted on the patent):			oup entity Government
☐ Issue Fee☐ Publication Fee (N	o small entity discount p	permitted)	A check is enclosed.  Payment by credit card  The Director is hereby overpayment, to Depos	1. Form PTO-2038 is authorized to charge	attached. the required fee(s), any do	
a. Applicant claims	t <b>us</b> (from status indicated s SMALL ENTITY statu	is. See 37 CFR 1.27.	☐ b. Applicant is no long			
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if requeecords of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than the Office.	e applicant; a register	red attorney or agent; or t	he assignee or other party in
Authorized Signature				Date		
Typed or printed name						
This collection of informan application. Confident submitting the completed his form and/or suggestion 1450. Alexandria V	ation is required by 37 C iality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450 DC	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the	on is required to obtain or re 1.14. This collection is esti depending upon the indivi- e Chief Information Office COMPLETED FORMS TO	etain a benefit by the mated to take 12 min dual case. Any comn r, U.S. Patent and Tra D. THIS ADDRESS.	public which is to file (an utes to complete, including nents on the amount of tidemark Office, U.S. Dep END TO: Commissioner	d by the USPTO to process) ng gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450.

Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/766,362 01/19/2001		Solomon S. Steiner	1951300.00047 8907		
45200 75	45200 7590 07/22/2010		EXAMINER		
K&L Gates LLP 1900 MAIN STREET, SUITE 600			SHEIKH, HUMERA N		
			ART UNIT	PAPER NUMBER	
IRVINE, CA 9261	4-7319		1615		
			DATE MAIL ED: 07/22/201	0	

# **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)					
	09/766,362	STEINER ET AL.					
Notice of Allowability	Examiner	Art Unit					
	Humera N. Sheikh	1615					
	numera N. Sheikh	1615					
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate communication is supplication is supplication.	this application. If not included unication will be mailed in due course. <b>THIS</b>	ve				
1. This communication is responsive to paper filed 30 March	<u>2010</u> .						
2. $\boxtimes$ The allowed claim(s) is/are $\underline{1,3-5,7,8,10-12,14,16-18}$ and $\underline{2}$	<u>20-23</u> .						
<ul> <li>3. ☐ Acknowledgment is made of a claim for foreign priority u</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> <li>1. ☐ Certified copies of the priority documents have</li> <li>2. ☐ Certified copies of the priority documents have</li> </ul>	e been received.						
3.   Copies of the certified copies of the priority do	cuments have been receive	d in this national stage application from the					
International Bureau (PCT Rule 17.2(a)).							
* Certified copies not received:							
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirements					
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which giv							
5. CORRECTED DRAWINGS ( as "replacement sheets") must	st be submitted.						
(a) 🔲 including changes required by the Notice of Draftspers	(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached						
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date							
<ul><li>(b) ☐ including changes required by the attached Examiner' Paper No./Mail Date</li></ul>	(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date						
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the							
6. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT							
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5. ☐ Notice of In	formal Patent Application					
2.  Notice of Draftperson's Patent Drawing Review (PTO-948)		ummary (PTO-413),					
3. Information Disclosure Statements (PTO/SB/08),	Paper No.⁄ 7.	Mail Date Amendment/Comment					
Paper No./Mail Date  4. Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner's	Statement of Reasons for Allowance					
of Biological Material	9.	<u></u>					
/Humera N. Sheikh/							
Primary Examiner, Art Unit 1615							

### **DETAILED ACTION**

### Status of the Application

Receipt is acknowledged of the Request for Continued Examination (RCE) under 37 C.F.R. 1.114, the Amendment and Applicant's Arguments/Remarks, all filed 03/30/10.

Claims 1, 3-5, 7, 8, 10-12, 14, 16-18 and 20-23 are pending in this action. Claims 1, 7, 14, 20 and 21 have been amended. New claims 22-23 have been added. Claims 1, 3-5, 7, 8, 10-12, 14, 16-18 and 20-23 are allowed.

#### Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 30 March 2010 has been entered.

\* \* \* \* \*

## Allowable Subject Matter

Claims 1, 3-5, 7, 8, 10-12, 14, 16-18 and 20-23 are allowed.

The following is an examiner's statement of reasons for allowance: The primary reasons for allowance are that the prior art of record (Steiner et al. - U.S. Pat. No. 5,503,852 & Illum - U.S. Pat. No. 5,690,954) does not disclose, teach nor fairly suggest the instant nasally-administered composition comprising antihistamine-coated diketopiperazine microparticles whereby the microparticles are between 10 and 20 microns in diameter. Steiner further does not

disclose microparticles whereby more than 50% of the microparticles have a particle size greater than about 10 microns and wherein the particles are maximally retained in the nasal cavity. The microparticles of Steiner are mainly used for delivery to the pulmonary system, which thus requires smaller particles. In addition, the particles of Steiner are not drug-coated microparticles. Steiner's particles are formed by a co-precipitation process in which the diketopiperazine is dissolved in a solution, the solution being mixed with a second solution to form microparticles. In contrast, the microparticles of the instant invention are formed by obtaining pre-formed microparticles of diketopiperazine of a controlled size (10-20 microns) and mixing the preformed microparticles with an antihistamine to result in antihistamine coated on the surface of the diketopiperazine microparticles. Illum further does not teach drug-coated diketopiperazine microparticles whereby the microparticles are between 10 and 20 microns in diameter and whereby more than 50% of the microparticles have a particle size greater than about 10 microns.

In the Declaration filed by Dr. Marshall Grant, it was stated that the co-precipitated microparticles of Steiner have different physical and physiochemical characteristics. Based on Applicant's present amendment and remarks, the instant invention is rendered non-obvious and patentable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

\* \* \* \* \*

Correspondence

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Humera N. Sheikh whose telephone number is (571) 272-0604.

The examiner can normally be reached on Monday-Friday during regular business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Robert A. Wax, can be reached on (571) 272-0623. The fax phone number for the

organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have any questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Humera N. Sheikh/

Primary Examiner, Art Unit 1615

hns

July 19, 2010

Application/Control Number: 09/766,362

Art Unit: 1615

Page 5